divides an emitted light beam from a laser into a main beam and two sub beams **and** diffracts a reflected main beam that has previously been diffracted by a first hologram (28a, rejection equates to the claimed reflected beam dividing portion).

The second hologram (28b) taught by Yamazaki does not divide an emitted light beam from the laser (29) into three beams (main beam and two sub beams). Rather, the first hologram (28a) divides a reflected light beam into a main beam and two sub beams. Column 4, lines 50-55 discloses that the +1-order and -1-order diffracted beams emanating from the first hologram (28a) are made incident upon the photodetectors (31, 34), respectively, and the +1-order and -1-order diffracted beams emanating from the second hologram (28b) are incident upon photodetectors (32, 33). Figure 7 of Yamazaki shows that each photodetector (31, 34) provided on respective sides of laser (29) consists of a single detecting portion, rather than three detecting sections for receiving the main beam and two sub beams. For visual comparison, see elements 433, 435, 437, 453, 455, and 457 of Figure 5 of the current application. Yamazaki does not suggest photodetectors for receiving sub beams, since the second hologram (28b) does not generate sub beams.

In fact, Yamazaki teaches away from the optical semiconductor device and optical information processing device of claims 1 and 16. Yamazaki discusses the difficulty of a three beam method (main beam and two sub beams) being that "when use is made of a magneto-optical record medium as the optical record medium, a groove formed in the magneto-optical record medium has generally a depth of $\lambda/8$ (λ is a wavelength of the laser beam), and thus it is impossible to attain a large tracking error signal by the three beam method". See column 2, lines 48-53. To remedy this problem, Yamazaki teaches a method of detecting a tracking error signal in accordance with a push-pull method on the basis of the distribution of an amount of light in the far field of the diffracted beam caused by the astigmatism in the +1-order and -1-order diffracted beams diffracted by the second hologram (28b). See column 5, line 58 to column 6, line 16. The use of the push-pull method allows Yamazaki to perform a tracking servo using only **one** beam, rather than using three beams (the three beam method being discussed in the prior art section and shown in element 8a of Figure 2 of Yamazaki).

Therefore, the second hologram (28b) taught by Yamazaki cannot be considered to anticipate the emitted beam dividing portion required by claims 1 and 16. Favorable reconsideration of claims 1, 2, 9, and 16 is requested.

Claims 3 and 4 were rejected as being unpatentable over Yamazaki in view of Katayama (US 6,894,958). Applicants traverse this rejection. Claims 3 and 4 should be considered allowable for at least the same reasons as claim 1, from which they depend. Katayama does not remedy the deficiencies of Yamazaki, as previously noted. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 3 and 4 is requested.

Claim 5 was rejected as being unpatentable over Yamazaki in view of Opheij (US 4,918,679). Applicants traverse this rejection. Claim 5 should be considered allowable for at least the same reasons as claim 1, from which it depends. Opheij does not remedy the deficiencies of Yamazaki, as previously noted. Applicants are not conceding the correctness of the rejection as applied to the rejected claim. Favorable reconsideration of claim 5 is requested.

Claims 6-8 were rejected as being unpatentable over Yamazaki in view of Heemskerk (US 4,665,310). Applicants traverse this rejection. Claims 6-8 should be considered allowable for at least the same reasons as claim 1, from which they depend. Heemskerk does not remedy the deficiencies of Yamazaki, as previously noted. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 6-8 is requested.

Claims 17-21 were rejected as being unpatentable over Yamazaki in view of Hasegawa (US 5,881,043). Applicants traverse this rejection. Claims 17-21 should be considered allowable for at least the same reasons as claim 1, from which they depend. Hasegawa does not remedy the deficiencies of Yamazaki, as previously noted. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 17-21 is requested.

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In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612)455-3804.

Respectfully Submitted,

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Douglas P. Mueller
Reg. No.: 30,300
Hamre, Schumann, Mueller & Larson, P.C.
225 South Sixth Street
Suite 2650
Minneapolis, MN 55402
612.455.3800

DPM:mfe